



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/803,870 | 03/12/2001 | Philippe Morin | 9432-000134 | 9173 |
| 27572 | 7590 | 04/28/2005 | EXAMINER | |
| HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303 | | | VO, HUYEN X | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2655 | |

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,870

Applicant(s)

MORIN, PHILIPPE

Examiner

Huyen Vo

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 3/12/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant has submitted an amendment filed 10/6/2003, amending claims 1, 2, and 15, while arguing to traverse the art rejection based on amended limitation regarding "storing said first utterance of speech as a model in a user-built lexicon" (see *claim amendment*). Applicant's arguments have been considered but are not persuasive. De Armas et al. (US 5873064) fully anticipate these limitations in that sub-context tree for each application is created, wherein the sub-context trees contain an appropriate set of spoken command which must be uttered by a user in order to activate or act upon the object (*referring to element 42 in figure 2 and/or col. 6, lines 43-67, it is inherent that the set of appropriate spoken commands are stored within the system and process/analyze with help of a processor*). Applicant also argues to traverse prior art rejection of claim 15 based on the limitation regarding "*a processor for adding user-defined speech to said lexicon*". However, De Armas et al. (US 5873064) fully anticipate this limitation for the same reason above (*the system disclosed by De Armas et al. includes a processor to process/analyze signal*). Therefore, previous ground of rejection is maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9, 11, and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by De Armas et al. (US 5873064).

4. Regarding claim 1, De Armas et al. disclose a method of navigating a menu structure with an electronic product, comprising the steps of: identifying a first location (*sub-context object or window object*) within the menu (*set of window objects or sub-context tree*) (*col.2, 1n.50 - col.3, ln.14 and col.4, ln.35-43*); obtaining a first utterance of speech (*col.6, ln.19-67*); storing said first utterance of speech as a model in a user-built lexicon (*referring to element 42 in figure 2 and/or col. 6, lines 43-67, it is inherent that the set of appropriate spoken commands are stored within the system*); associating the first utterance with the first location and generating therefrom a stored first location (*sub-context object vocabulary set*) (*col.6, ln.50-67*); obtaining a second utterance of speech (*col.6, ln.19-67*); matching the second utterance with model of said first utterance to identify the stored first location (*sub-context object vocabulary set or vocabulary sub-sets*) within the menu (*set of window objects or sub-context tree*) (*col.5, 1n.44-59*); and navigating to the first location (*col.5, ln.44-59*).

5. Regarding claim 2, De Armas et al. discloses a method of navigating a menu structure with an electronic product, comprising the steps of: identifying a user-selected navigation path through the menu structure to a first location within the menu (*col. 2, ln. 50-col. 3, ln. 14 and col. 4, ln. 35-43*); obtaining a first utterance of speech (*col.6, ln.19-67*); storing said first utterance of speech as a model in a user-built lexicon (*referring to*

element 42 in figure 2 and/or col. 6, lines 43-67, it is inherent that the set of appropriate spoken commands are stored within the system); associating the first utterance with the navigation path (col.5, 1n.44-59 and col.7, ln .36-67); obtaining a second utterance of speech (col.6, ln.19-67); matching the second utterance with model of said first utterance to retrieve the navigation path (sub-context object path) associated with the first utterance (col. 5, ln. 44-59 and col. 7, 1n.36-67); and using the retrieved navigation path to navigate to the first location within the menu (col.5, ln. 44-59,. col.7, ln. 36-67 and col. 8, ln.25-46).

6. Regarding claim 3, De Armas et al. further disclose the method of navigating the menu structure with the electronic product, further comprising storing the navigation path as a sequence of navigation steps leading to the first location (*sub-context object level*) (col.7, 1n.36-67).

7. Regarding claim 4, De Armas et al. further disclose the method of navigating the menu structure with the electronic product, further comprising storing the navigation path as a semantic sequence of navigation steps leading to the first location (*context data file*) (col.4, ln.44-57, col.7, ln. 36-67 and col. 8, ln. 25-46).

8. Regarding claim 5, De Armas et al. further disclose the method of navigating the menu structure with the electronic product, wherein the menu structure includes associated text and the method further comprising storing the navigation path as a

Art Unit: 2655

semantic sequence of text associated with the navigation steps leading to the first location (ink field) (*col. 9, ln. 49-61*);

9. Regarding claim 6, De Armas et al. further disclose the method of navigating the menu structure with the electronic product, further comprising constructing a speech model associated with the first utterance (vocabulary set) and associating the speech model with the navigation path (*context data file*) (*col.6, ln.6-18 and 43-67 and col.8, ln. 25-35*).

10. Regarding claim 7, De Armas et al. further disclose the method of navigating the menu structure with the electronic product, further comprising using a speech recognizer (*voice recognition*) to compare the first and second utterances in performing a matching step (*col.3, ln.31-36; col-4, ln.35-43 and col. 6, ln.43-49*).

11. Regarding claim 8, De Armas et al. further disclose the method of navigating the menu structure with the electronic product, further comprising constructing a speech model associated with the first utterance and using the speech model to populate a lexicon of speech (*appropriate set of spoken commands*) (*col.6, ln.6-49*); and using a speech recognizer to compare the first and second utterances in performing a matching step (*col.4, ln.35-49 and col.8, ln.25-46*).

Art Unit: 2655

12. Regarding claim 9, De Armas et al. further disclose the method of navigating the menu structure with the electronic product, wherein the step of identifying the user-selected navigation path comprises displaying the first location on a visible display associated with the electronic product and prompting the user to provide the first utterance (*Fig.1A and col.5, ln.2-15*).

13. Regarding claim 11, De Armas et al. further disclose the method of navigating the menu structure with the electronic product, further comprising a providing user feedback of the association between the first utterance and the navigation path by the first location on a visible display associated with the electronic product and producing a textual representation of the first utterance (*Fig.1A, elements Child 1, OK and CANCEL; col.5, ln.2-15 and col.9, ln. 49-61*).

14. Regarding claim 13, De Armas et al. further disclose the textual representation (*decoded phrase*) is provided using a speech recognizer (*col.9, ln.19-61*).

15. Regarding claim 14, De Armas et al. further disclose the textual representation (*decoded phrase*) is provided by storing a text data associated with the first utterance and displaying the text data (*window text string*) at user request (*Fig. 2, col. 6, ln.19-28; col. 8, ln.25-29 and col.9, ln.19-61*).

16. Regarding claim 15, De Armas et al. further disclose a voice binding system to aid in user operation of electronic devices, comprising: a menu navigator that provides a traversable menu structure offering a plurality of predefined menu locations (*Fig. 1A, col. 4, ln. 25-43 and col. 5, ln. 36-39*); a speech recognizer having an associated lexicon data store (*vocabulary set*) (*col. 8, ln. 25-33 and col. 9, ln. 14-47*); a processor for adding user-defined speech to the lexicon (*the action of edit box*) (*col. 7, ln. 23-27*), and a voice binding system couple to the menu navigator for associating the user-defined speech with predetermined menu locations within the menu structure, operable to traverse to a predetermined menu location in response to a spoken utterance corresponding to the user-defined speech (*col. 7, ln. 1-35*).

17. Regarding claim 16, De Armas et al. further disclose the menu navigator includes at least one navigation button operable to traverse the menu structure (*Fig. 1A, element 34*).

18. Regarding claim 17, De Armas et al. further discloses the voice binding system stores predefined menu locations as traversal path sequences (*col. 8, ln. 25-32 and col. 10, ln. 21-32*).

19. Regarding claim 18, De Armas et al. further discloses the voice binding system stores predefined menu locations as semantic sequences (*col. 9, ln. 30-61*).

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 10, 12, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Armas et al. (US 5873064) in view of Croft (US 6493670).

22. Regarding claims 10 and 12, De Armas et al. further disclose the method of navigating the menu structure with the electronic product, further comprising a providing user feedback of the association between the first utterance and the navigation path by the first location on a visible display associated with the electronic product (*Fig. 1A and col. 5, ln. 2-15*). De Armas et al. does not specifically disclose the method of navigating the menu structure with the electronic product, wherein it produced an audible representation of the first utterance, wherein the audible representation is provided by storing the first utterance as an audio data and replaying the audio data at user request.

Croft teaches when the user speaks into the electronic product will produce the audible output comparable to the sentence that was spoken by storing the first utterance as the audio data and replaying the audio data (*speech waveform memory*) (*Fig. 5, step 510 and col. 5, 14-28*). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method

Art Unit: 2655

of navigating the menu structure of the electronic product of De Armas et al. with the capability of producing the audible feedback output, as taught by Croft, in order to confirm to the user at user request the correctness of the speech recognition as taught by Croft (*col.5, ln.16-18 and 27*).

23. Regarding claims 19 and 20, De Armas et al. further disclose the voice binding system comprising a user feedback system operable to textual reproduce the user-defined speech associated with predefined menu locations (*col. 9, ln. 49-61*). De Armas et al. does not specifically disclose the voice binding system comprising a user feedback system operable to audibly reproduce the user-defined speech (*stored as recorded speech waveforms*) associated with predefined menu locations. Craft teaches when the speech recognition receives the user's spoken input, the system will produce the audible output if the spoken utterance from the user does match the defined vocabulary of the speech recognition', and playback recorded speech waveforms (*col. 5, ln. 20-24*): Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the voice binding system of De Armas et al. with the user feedback system, as taught by Croft, in order to confirm to the user the correctness of the speech recognition as taught by Croft (*col. 5, ln.16-18 and 27*).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

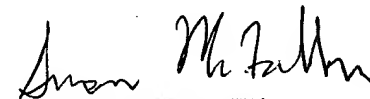
Art Unit: 2655

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


SUSAN MCFADDEN
PRIMARY EXAMINER

Art Unit: 2655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HXV

April 22, 2005
